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Oct. 29, 2023
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Dear Editor,

This paper, which is entitled

Event-triggered adaptive fault estimation and fault-tolerant control for strict-feedback nonlinear systems with full state constraints,

contains our original work. (1) This paper investigates an event-based approach about fault estimation and fault-tolerance co-design for strictly feedback nonlinear systems, which not only maintains the system stability, but also reduces the waste of resources. (2) A more general intermediate variable method that incorporates a time-varying function is devised and makes the literature using the previous intermediate variable method a special case of this paper. In addition, the fault estimator constructed based on this approach is much more accurate. (3) Based on our previous work, an improved and more rational fault switching signal was proposed, thus improving the applicability to different fault signals. (4) A novel triggered approach based on system characteristic is implemented to further reduce the computational requirements of the communication process.

The keywords in this article are: fault estimation, fault-tolerant control, full state constrains, event-triggered mechanism.

Based on the above description, the content studied in this paper is consistent with the objectives and scope of the journal to be submitted. Here are some statements:

a. This manuscript is the authors' original work and has not been published nor has it been submitted simultaneously elsewhere.

b. All authors have checked the manuscript and have agreed to the submission. Now, we would like to submit it for publication in

Nonlinear Dynamics

Thank you very much for your attention to our paper.

Sincerely,

Mingrui Liu, Libing Wu, Meng Wu, Wenchao Ma.